Case 3477

Nesocyrtosoma Marcuzzi, 1976 (Insecta, Coleoptera, TENEBRIONIDAE): proposed establishment of availability and designation of *Cyrtosoma inflatum* Marcuzzi, 1976 as the type species.

Katie J. Hopp

210 Cedar Dale Drive, Central, South Carolina 29630, U.S.A. (e-mail: katiehopp@gmail.com)

Michael A. Ivie

Montana Entomology Collection, Marsh Lab, Rm 50, Montana State University, Bozeman, Montana, 59717, U.S.A. (e-mail: mivie@montana.edu)

Patrice Bouchard

Canadian National Collection of Insects, Arachnids and Nematodes, Agriculture and Agri-Food Canada, 960 Carling Ave, Ottawa, Ontario, K1A OC6, Canada (e-mail: patrice.bouchard@agr.gc.ca)

Warren E. Steiner Jr.

Department of Entomology, NHB-187, Smithsonian Institution, Washington, District of Columbia, 20013–7012, U.S.A. (e-mail: steinerw@si.edu)

Rolf L. Aalbu

18 Sea Lion Court Sacramento, California, 95831, U.S.A. (e-mail: raalbu@comcast.net)

Abstract. The purpose of this application, under Articles 10.1, 13.3 and 81.1 of the Code, is to make available the genus-group name *Nesocyrtosoma* Marcuzzi, 1976 and subsequently designate *Cyrtosoma inflatum* Marcuzzi, 1976 as the type species. As this is the prevailing nomenclatural usage, this act will serve to promote stability in this West Indian genus of tenebrionid beetles.

Keywords. Nomenclature; taxonomy; Coleoptera; TENEBRIONIDAE; *Nesocyrtosoma*; *Hesiodobates*; *Cyrtosoma*; *Pachycyrtosoma*; *Serrania*; *inflatum*; darkling beetles; West Indies.

^{1.} The name *Nesocyrtosoma* was proposed as a new subgenus of *Cyrtosoma* Perty, 1830 by Marcuzzi (1976, p. 137). Marcuzzi (1976) described the subgenus briefly and included three new species in it: *Cyrtosoma* (*Nesocyrtosoma*) inflatum (p. 138), *C.* (*N.*) tumefactum (p. 138) and *C.* (*N.*) gebieni (p. 139). As recently reported by Hopp & Ivie (2009, p. 2), Marcuzzi (1976) did not designate a type species in his original publication and therefore his genus-group name is unavailable. *Nesocyrtosoma*

however has been used as a valid genus-group name (as either a genus or subgenus) and attributed to Marcuzzi (1976) subsequently in at least 18 publications (Marcuzzi, 1984, p. 102, 1991, p. 235, 1999, p. 81; Doyen, 1989, p. 280; Doyen & Poinar, 1994, p. 45; Garrido & Gutiérrez, 1996, p. 281; Perez-Gelabert, 1999, p. 31 [as *Nesocyrtoma*], 2008, p. 115; Poinar et al. 2001, p. 292; Arillo & Ortuño, 2005, p. 22; Ivie et al., 2008, p. 254; Vitali, 2008, p. 11; Hopp & Ivie, 2009, p.1; Garrido & Varela, 2010, p. 32; Matthews et al., 2010, p. 633; Hopp, 2011, p. 242; Garrido & de Armas, 2012, p. 70; Peck & Perez-Gelabert, 2012, p. 27). *Nesocyrtosoma* is restricted to the West Indies and currently includes 45 valid species-group names.

- 2. Hesiodobates Kaszab & Schawaller, 1984 (p. 2) was described as a monotypic genus for one new Dominican amber fossil species (*H. antiquus* Kaszab & Schawaller, 1984, p. 3) based on a single specimen. Although Hesiodobates has been included in lists of taxa described in Dominican amber (e.g. Poinar, 1992, p. 154; Poinar et al., 2001, p. 205) the genus was first synonymized with Nesocyrtosoma by Doyen & Poinar (1994, p. 45) and recently confirmed as a synonym of Nesocyrtosoma in the revision of Hopp & Ivie (2009, p. 13).
- 3. The name *Pachycyrtosoma* was proposed as a new subgenus of *Cyrtosoma* Perty, 1830 by Marcuzzi (1999, p.81) with *C.* (*P.*) *merkli* Marcuzzi, 1999 (p. 82) as its type species by original designation. This genus-group name was used subsequently in a checklist (Perez-Gelabert, 2008, p. 115) before Hopp & Ivie (2009, p. 13) synonymized *Pachycyrtosoma* with *Nesocyrtosoma*.
- 4. Garrido (2003, p. 49) proposed the new genus name *Serrania* for a single species *Diaperis viridula* Zayas, 1988 (p. 93), being its type species by monotypy. The name *Serrania* was subsequently used as valid in Peck (2005, p. 150) before Hopp & Ivie (2009, p. 13) synonymized it with *Nesocyrtosoma*.
- 5. Strict application of the Principle of Priority would mean the recognition of Hesiodobates Kaszab & Schawaller, 1984 as the valid name for this group of tenebrionid beetles. However, we do not believe that such action would promote stability in the future. The name Nesocyrtosoma has been treated [although incorrectly] as available and valid by all authors since it was first proposed by Marcuzzi (1976) while the available genus-group names Hesiodobates, Pachycyrtosoma and Serrania have seldom been used as valid after they were first proposed and have been recognized as junior synonyms of Nesocyrtosoma in the literature. We believe that the conservation of Nesocyrtosoma, as it has been used to this day, is necessary in order to promote stability of usage in the future. Following Recommendation 69A (and as documented by Hopp & Ivie, 2009, p. 2), we propose the originally included species Cyrtosoma (Nesocyrtosoma) inflatum Marcuzzi, 1976 as the type species of Nesocyrtosoma because it is common within its range in Cuba and its holotype is obtainable for study at the Natural History Museum, London, U.K.
 - 6. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary power to rule that the name *Nesocyrtosoma* Marcuzzi, 1976 is not unavailable despite not being accompanied by a type species fixation in the original publication and designate *Cyrtosoma inflatum* Marcuzzi, 1976 as its type species;
 - (2) to place on the Official List of Generic Names in Zoology the name Nesocyrtosoma Marcuzzi, 1976 (gender: neuter), type species Cyrtosoma inflatum Marcuzzi, 1976 as designated in (1) above;

(3) to place on the Official List of Specific Names in Zoology the name *inflatum* Marcuzzi, 1976, as published in the binomen *Cyrtosoma inflatum* Marcuzzi, 1976 (specific name of the type species of *Nesocyrtosoma* Marcuzzi, 1976, as ruled in (1) above).

References

- Arillo, A. & Ortuño, V.M. 2005. Catalogue of fossil insect species described from Dominican amber (Miocene). Stuttgarter Beiträge zur Naturkunde, Serie B (Geologie und Paläontologie), 352: 1–68.
- **Doyen, J.T.** 1989. Reconstitution of Coelometopini, Tenebrionini and related tribes of America north of Colombia (Coleoptera: Tenebrionidae). *Journal of New York Entomological Society*, **97**: 277–304.
- Doyen, J.T. & Poinar, G.O. Jr. 1994. Tenebrionidae from Dominican amber (Coleoptera). Entomologica Scandinavica, 25: 27–51.
- Garrido, O.H. 2003. *Diaperis viridula* (Coleoptera: Tenebrionidae: Diaperini) es un táxon válido que representa un género nuevo para Cuba. *Solenodon*, 3: 49–52.
- Garrido, O.H. & de Armas, L.F. 2012. Cuatro especies nuevas del género *Strongylium* (Coleoptera: Tenebrionidae) de La Española, Antillas Mayores. *Solenodon*, 10: 63–71.
- Garrido, O.H. & Gutiérrez, E. 1996. Consideraciones sobre el género *Cyrtosoma* (Coleoptera: Tenebrionidae: Cnodalonini) in Cuba con la descripción de nueva especie. *Insecta Mundi*, 10: 281–284.
- Garrido, O.H. & Varela, C. 2010. Nueva especie de *Nesocyrtosoma* Marcuzzi, 1976 (Coleoptera: Tenebrionidae: Coelometopini) de la República Dominicana. *Novitates Caribaea*, 3: 32–35.
- **Hopp, K.J.** 2011. Nesocyrtosoma bromelicolus Garrido and Varela, a new synonym of Nesocyrtosoma crenulatum Hopp and Ivie (Coleoptera: Tenebrionidae). The Coleopterists Bulletin, 65: 242–242.
- Hopp, K.J. & Ivie, M.A. 2009. A revision of the West Indian genus *Nesocyrtosoma* Marcuzzi (Coleoptera: Tenebrionidae). *The Coleopterists Society, Monograph Series*, 8: 1–138.
- Ivie, M.A., Marske, K.A., Foley, I.A., Guerrero, K.A. & Ivie, L.L. 2008. Appendix 2. Species lists of the beetles, non-beetle hexapods and non-hexapod invertebrates of Montserrat. Pp. 237–311 in Young, R.P. (Ed.), A biodiversity assessment of the Centre Hills, Montserrat. Durrell Conservation Monograph No. 1. Durrell Wildlife Conservation Trust, Jersey, Channel Islands.
- Kaszab, Z. & Schawaller, W. 1984. Eine neue Schwarzkäfer-Gattung und -Art aus Dominikanischem Bernstein (Coleoptera, Tenebrionidae). Stuttgarter Beiträge zur Naturkunde. Serie B (Geologie und Paläontologie), 109: 1–6.
- Marcuzzi, G. 1976. New species of Neotropical Tenebrionidae (Coleoptera). Annales Historico-Naturales Musei Nationalis Hungarici, 68: 117–140.
- Marcuzzi, G. 1984. A catalogue of tenebrionid beetles (Coleoptera: Heteromera) of the West Indies. *Folia Entomologica Hungarica*, **45**: 69–108.
- Marcuzzi, G. 1991. New species of *Cyrtosoma* Perty (Coleoptera: Tenebrionidae) from the neotropical region. *Elytron*, **5**: 235–252.
- Marcuzzi, G. 1999. Five new species and a new subgenus of *Cyrtosoma* Perty from the West Indies (Coleoptera: Tenebrionidae). *Annales Historico-Naturales Musei Nationalis Hungarici*, **91**: 81–86.
- Matthews, E.G., Lawrence, J.F., Bouchard, P., Steiner, W.E. & Ślipiński, S.A. 2010. 11.14. Tenebrionidae Latreille, 1802. Pp. 574–659 in Leschen, R.A.B., Beutel, R.G. & Lawrence, J.F. (Eds.), Handbook of zoology. A natural history of the phyla of the animal kingdom. vol. IV Arthropoda: Insecta. Part 38. Coleoptera, Beetles, vol. 2: Systematics (Part 2). Walter de Gruyter, Berlin.
- Peck, S.B. 2005. A checklist of the beetles of Cuba with data on distributions and bionomics (Insecta: Coleoptera). Arthropods of Florida and Neighboring Land Areas, 18: i-vi, 1–241.

- Peck, S.B. & Perez-Gelabert, D.E. 2012. A summary of the endemic beetle genera of the West Indies (Insecta: Coleoptera); bioindicators of the evolutionary richness of this Neotropical archipelago. *Insecta Mundi*, **0212**: 1–29
- Perez-Gelabert, D.E. 1999. Catálogo sistemático y bibliografía de la biota fósil en ámbar de al República Dominicana. *Hispaniolana, Nueva Serie*, 1: 1–65.
- **Perez-Gelabert**, **D.E.** 2008. Arthropods of Hispaniola (Dominican Republic and Haiti): a checklist and bibliography. *Zootaxa*, **1831**: 1–530.
- **Perty, J.A.M.** 1830. Delectus animalium articulatorum, quae in itinere per Brasiliam annis MDCCCXVII-MDCCCXX jussu et auspiciis Maximilliani Josephi I. Bavariae regis augustissimi collegerunt Dr. J. B. de Spix. . . et Dr. C. F. Ph. de Martius. . . Digessit, descripsit, pingenta curavit Dr. Maximilianus Perty, praefatus est et editit Dr. C. F. Ph. de Martius. [Fasc. 1]. Pp. 1–60, pls. 1–12. J.A.M. Perty, Monachii.
- Poinar, G.O. 1992. Life in Amber. 350 pp. Stanford University Press, Stanford, California.
- Poinar, G.O., Poinar, G.O. Jr. & Poinar, R. 2001. The amber forest: A reconstruction of a vanished world. 292 pp. Princeton University Press, Princeton, New Jersey.
- Vitali, F. 2008. A new species of *Tyrtaeus* Champion, 1913 from Dominican amber (Coleoptera Tenebrionidae). *Entomapeiron*, 3: 11–16.
- Zayas, F. 1988. Entomofauna Cubana. Orden Coleoptera. Separata. Descripción de nuevas especies. 211 pp. Editorial Cientifico-Tecnica, La Habana.

Acknowledgement of receipt of this application was published in BZN 65: 242.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the I.C.Z.N., Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).